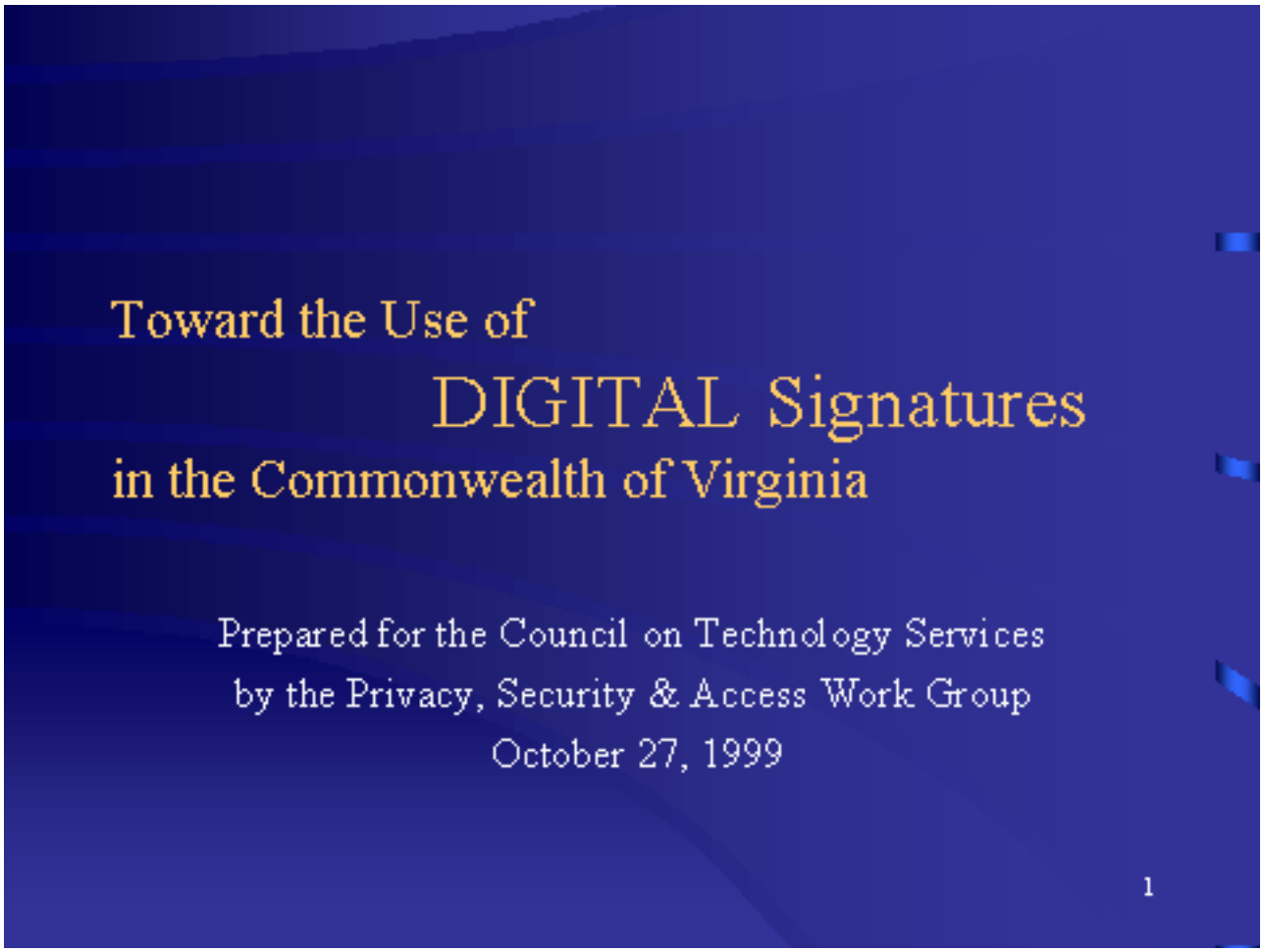
Toward the Use of
DIGITAL Signatures
in the Commonwealth of Virginia
Prepared for the Council on Technology Services
by the Privacy, Security & Access Work Group
October 27, 1999
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Today's Topics
• Background
– Commonwealth Context
– Work Group *events* to date
• About Digital Signatures
• Key Findings & Recommendations
• Discussion
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Work Group Events since June
• Monthly PSA Work Group sessions
• Presentation for COTS
• Panel at COVITS (Health Canada, Federal PKI Steering Committee & Capital One)
• Monitoring legislative developments
– Federal, state & model
• Video teleconference with the State of Washington
• Planning "First Wave" agencies at DGIF
• Federal Bridge Certification Architecture at UVa
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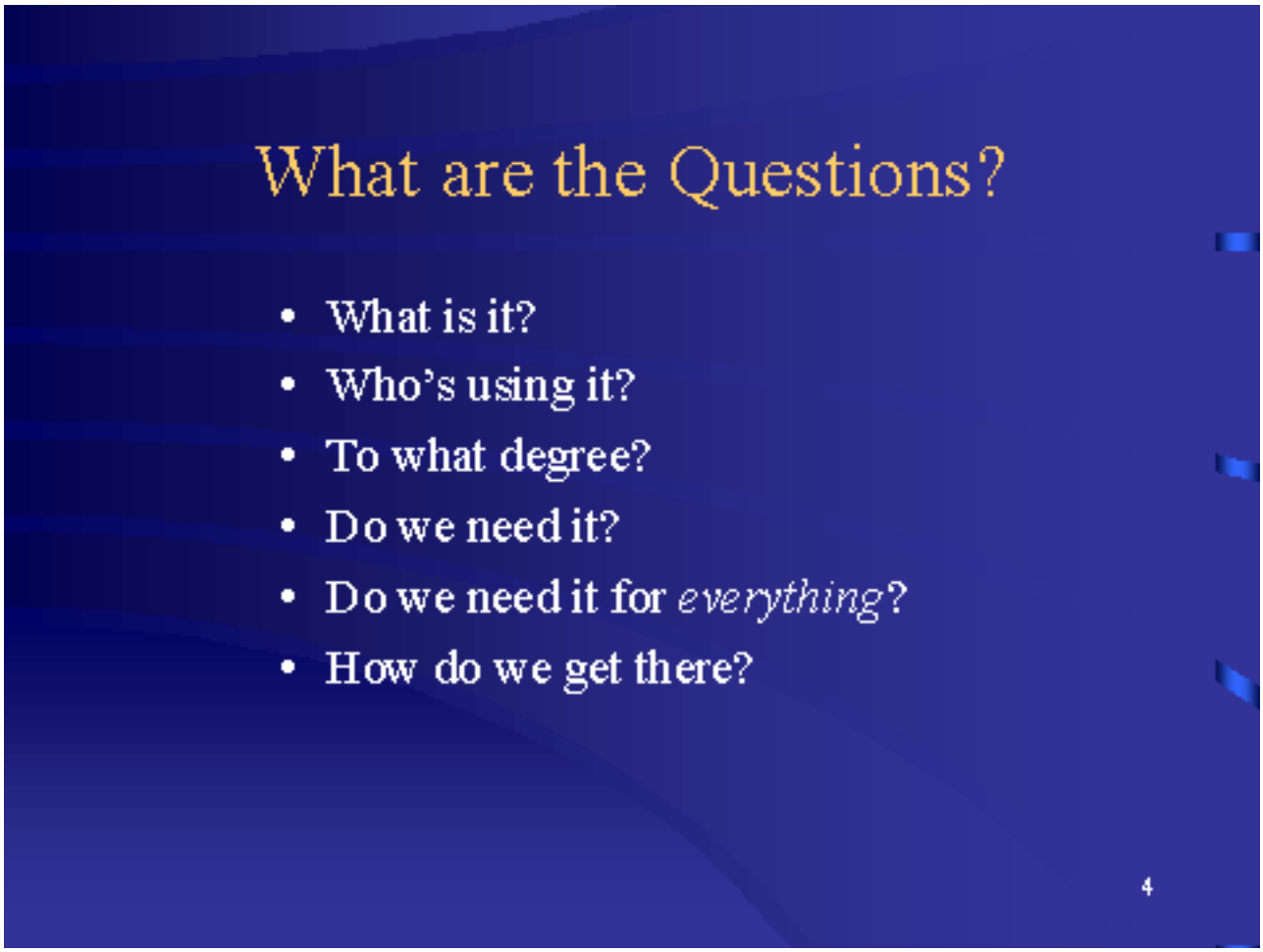
What are the Questions?
What is it?
Who's using it?
To what degree?
Do we need it?
Do we need it for everything?
How do we get there?
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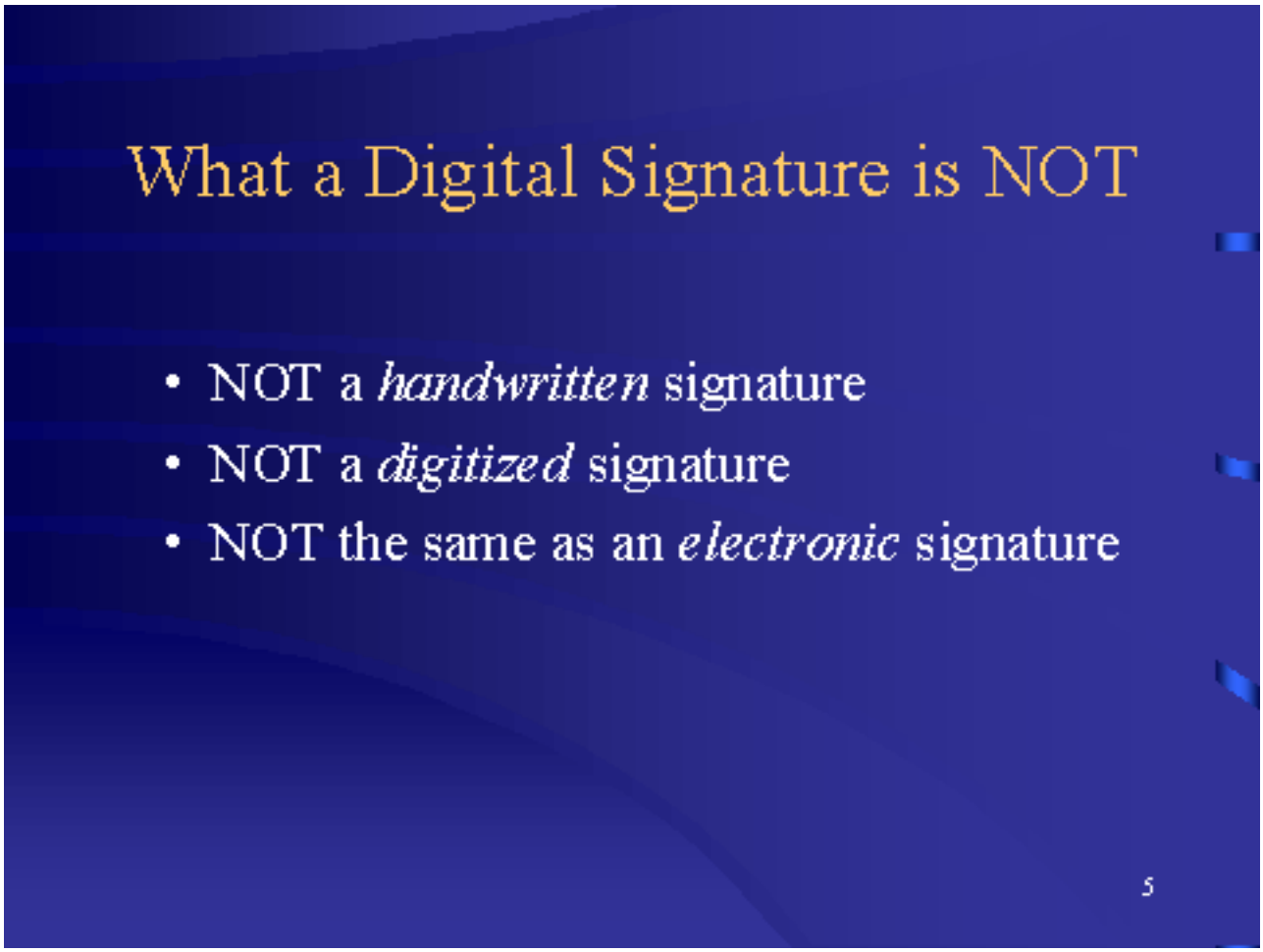
What a Digital Signature is NOT
• NOT a *handwritten* signature
• NOT a *digitized* signature
• NOT the same as an *electronic* signature
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What a Digital Signature IS
It results from an arithmetic operation on data
the data it "signs" cannot be altered without detection
It uses public & private "keys"
It relies on "certificates" issued to individuals within a PKI
It involves sophisticated encryption
It provides
a high level of authentication
technical non-repudiation
confidentiality
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Demystifying Digital Signatures
• A video, courtesy of Washington State
Department of Information Services
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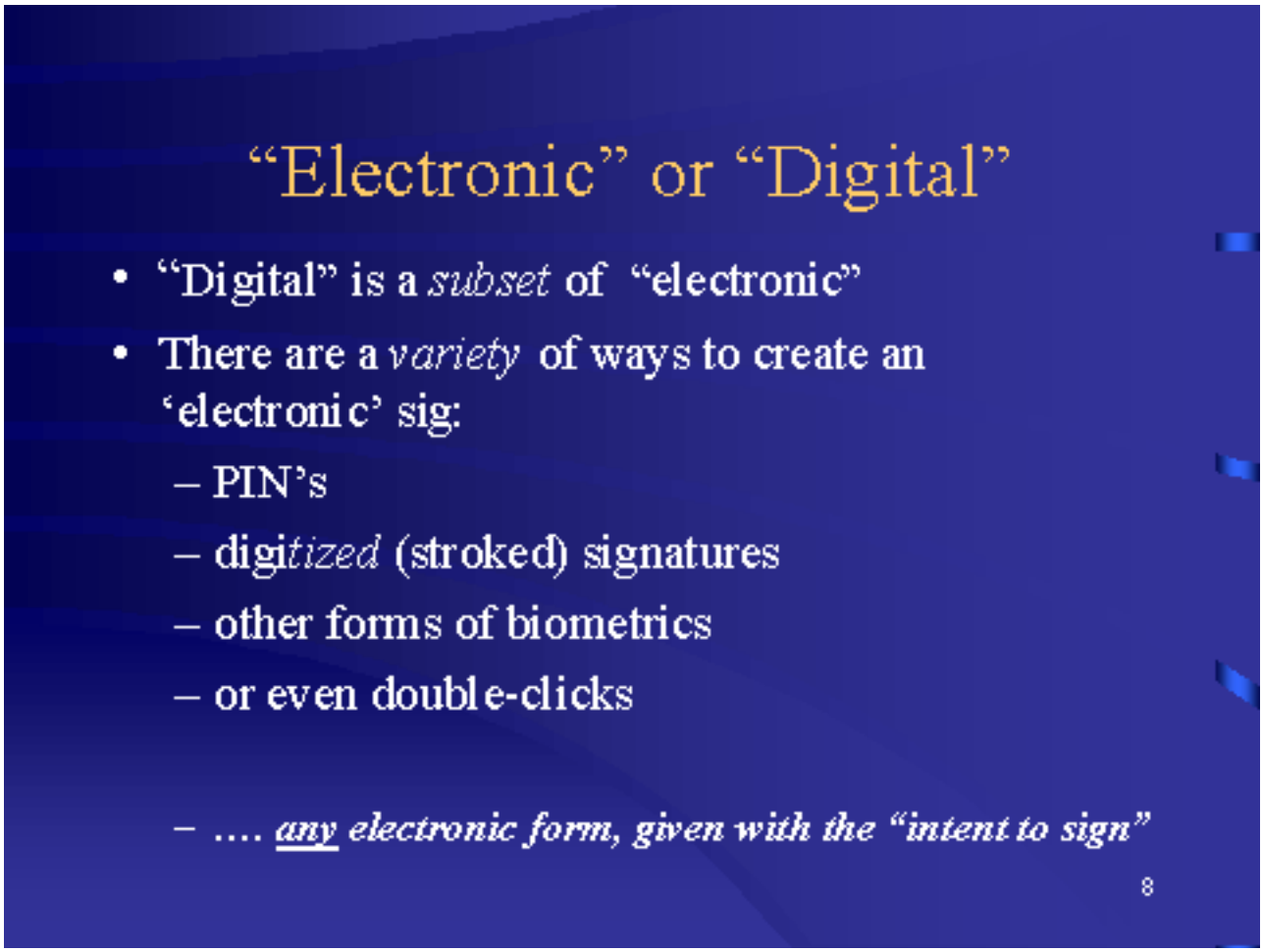
"Electronic" or "Digital"
• "Digital" is a *subset* of "electronic"
• There are a *variety* of ways to create an 'electronic' sig:
– PIN's
– digi*tized* (stroked) signatures
– other forms of biometrics
– or even double-clicks
– …. ***any*** *electronic form, given with the "intent to sign"*
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Are Digital Certificates & signatures "right" for every signing process?
• Not necessarily - a spectrum of electronic signatures could be valid
• A variety of electronic signatures are already in use (e.g., digitized signatures on the Driver's license, PIN numbers, etc.)
• Criteria should be applied appropriately to match methods of e-signing to business processes
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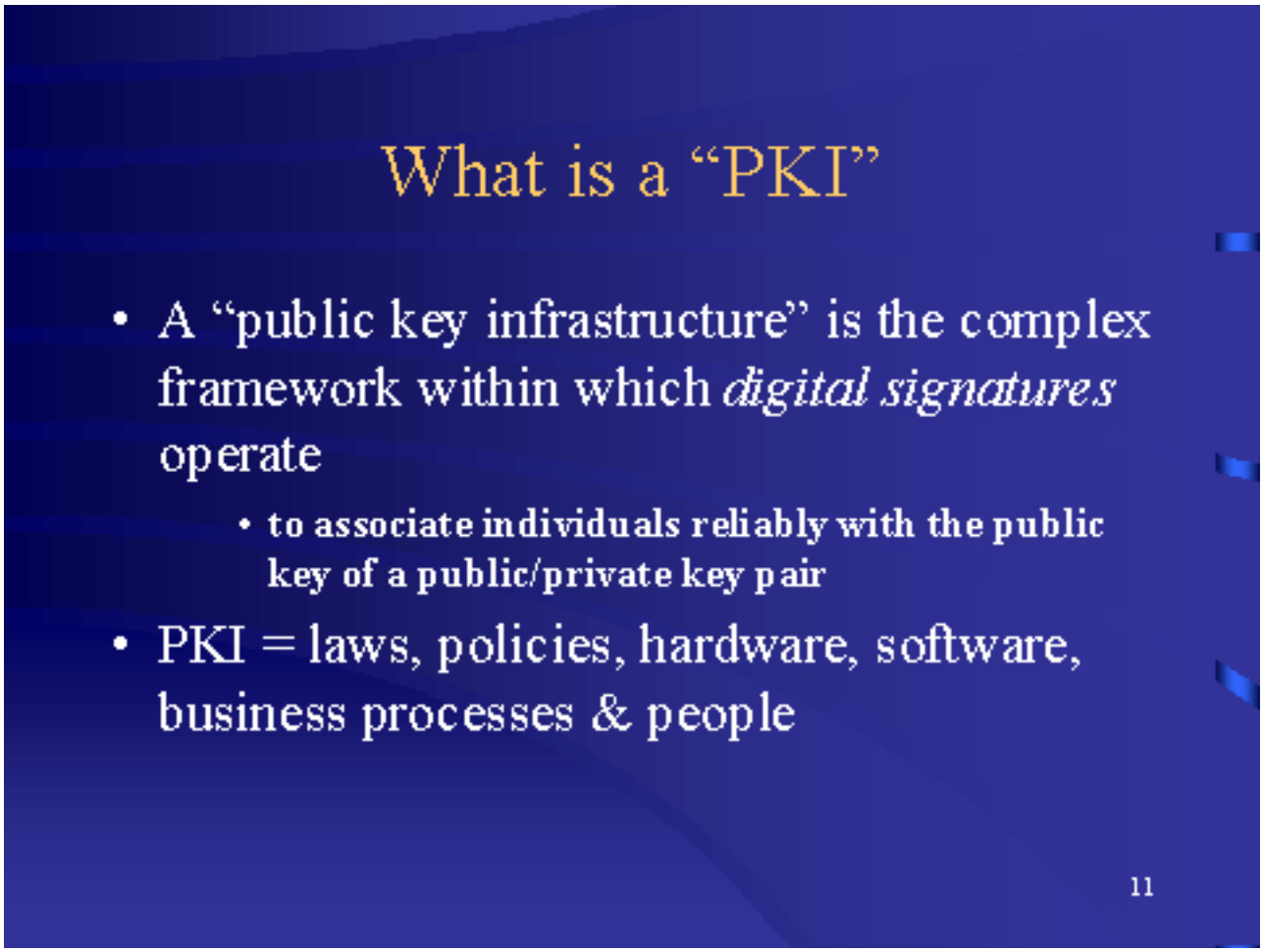

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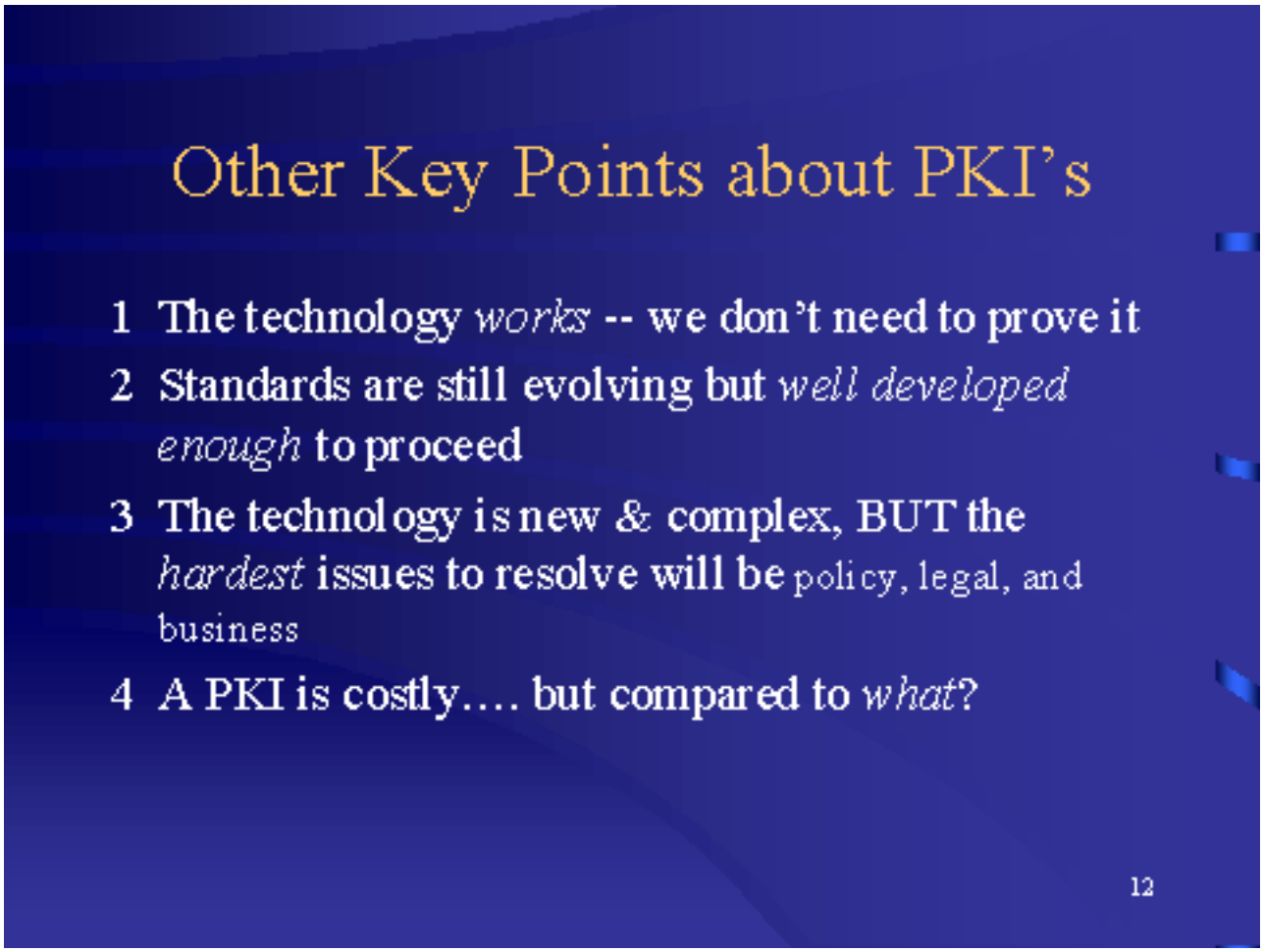

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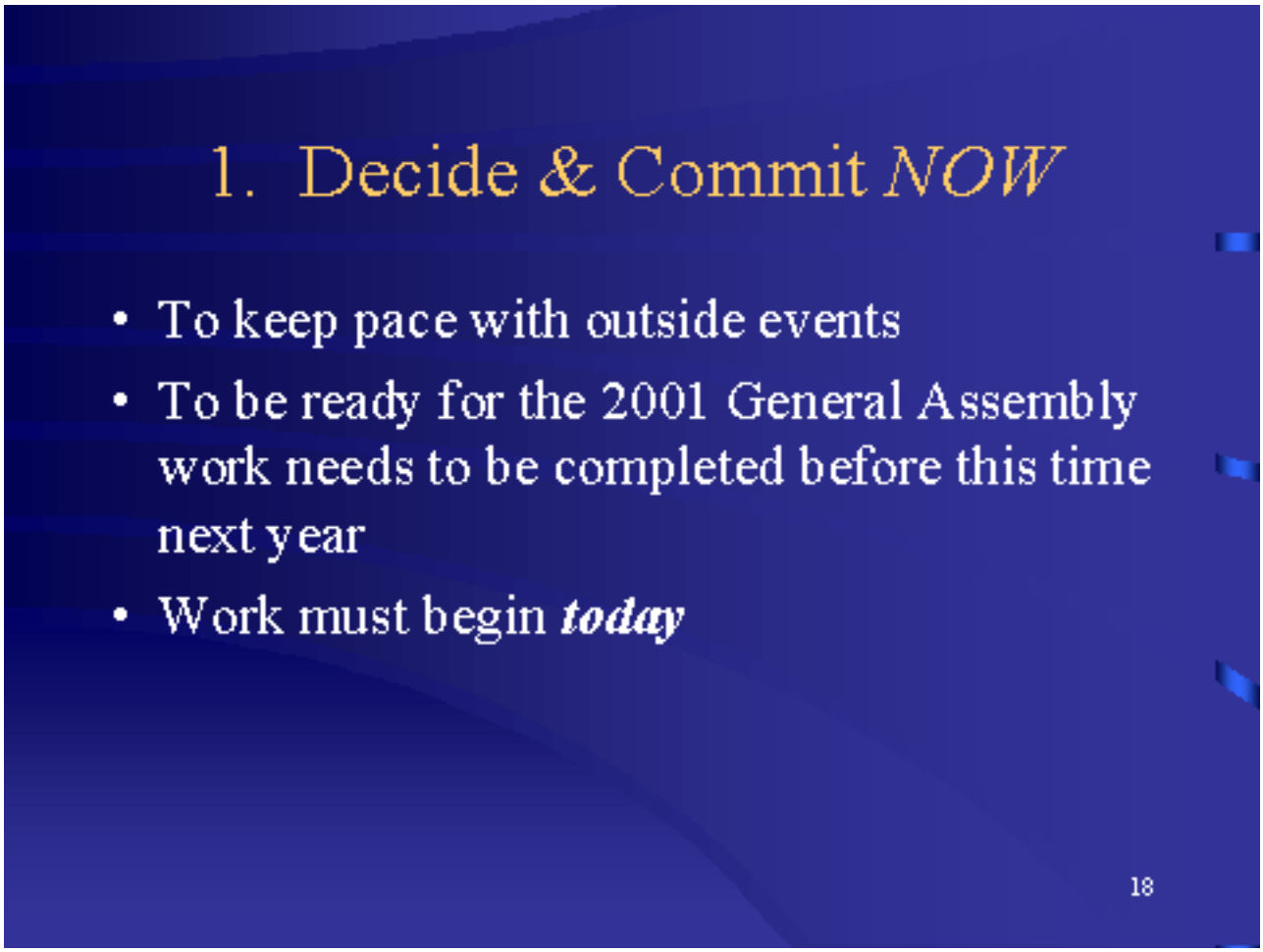

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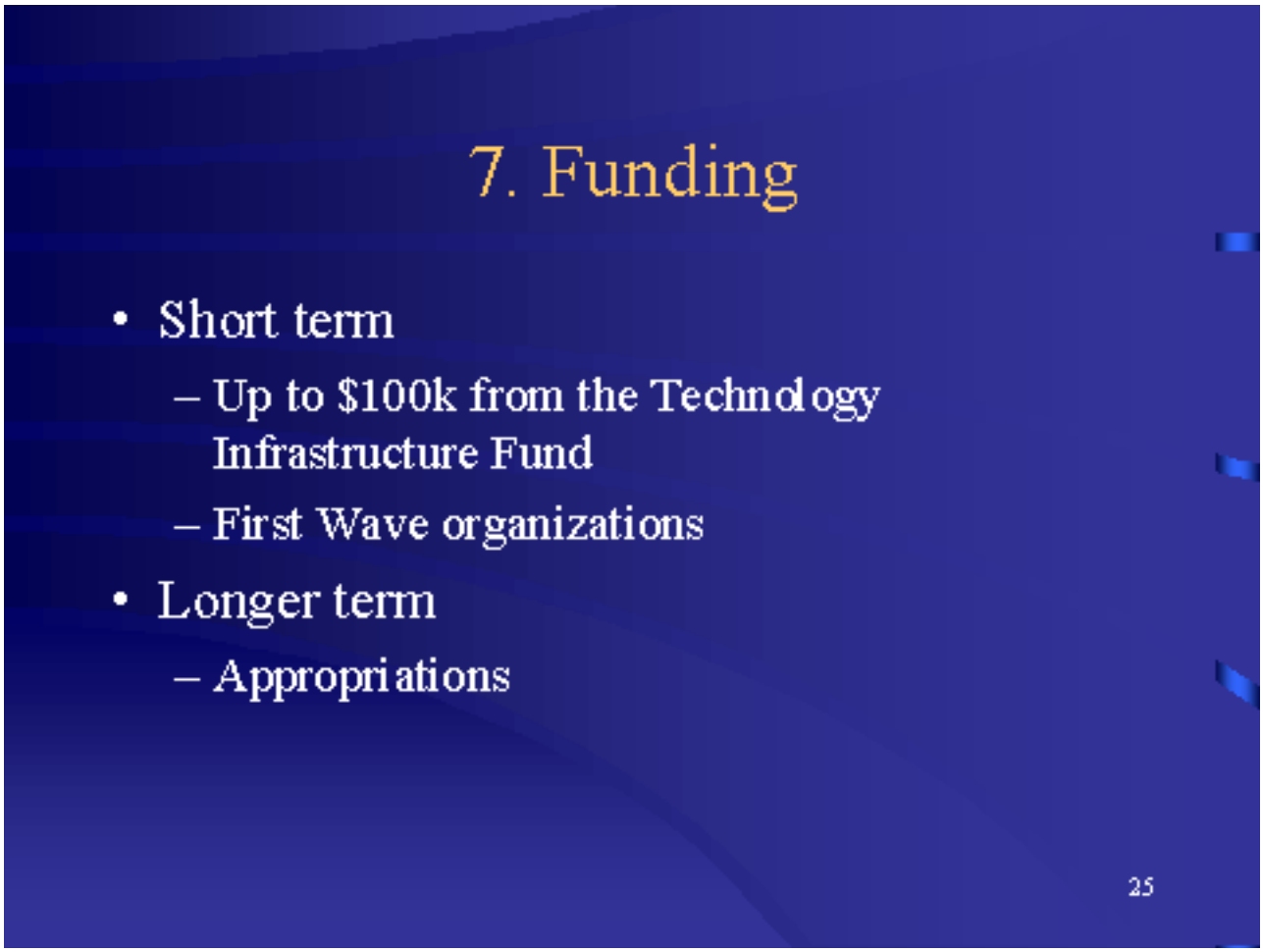

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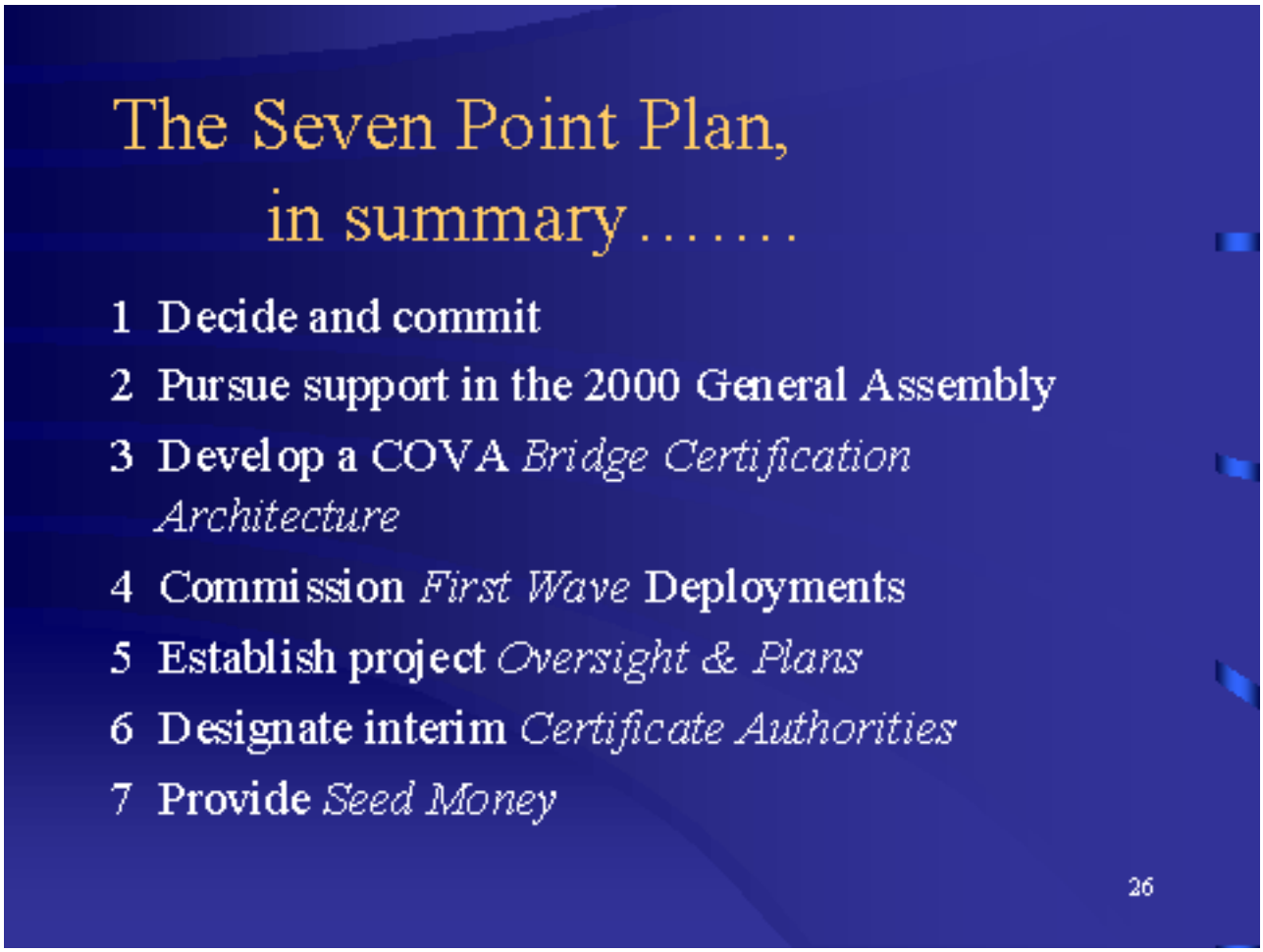

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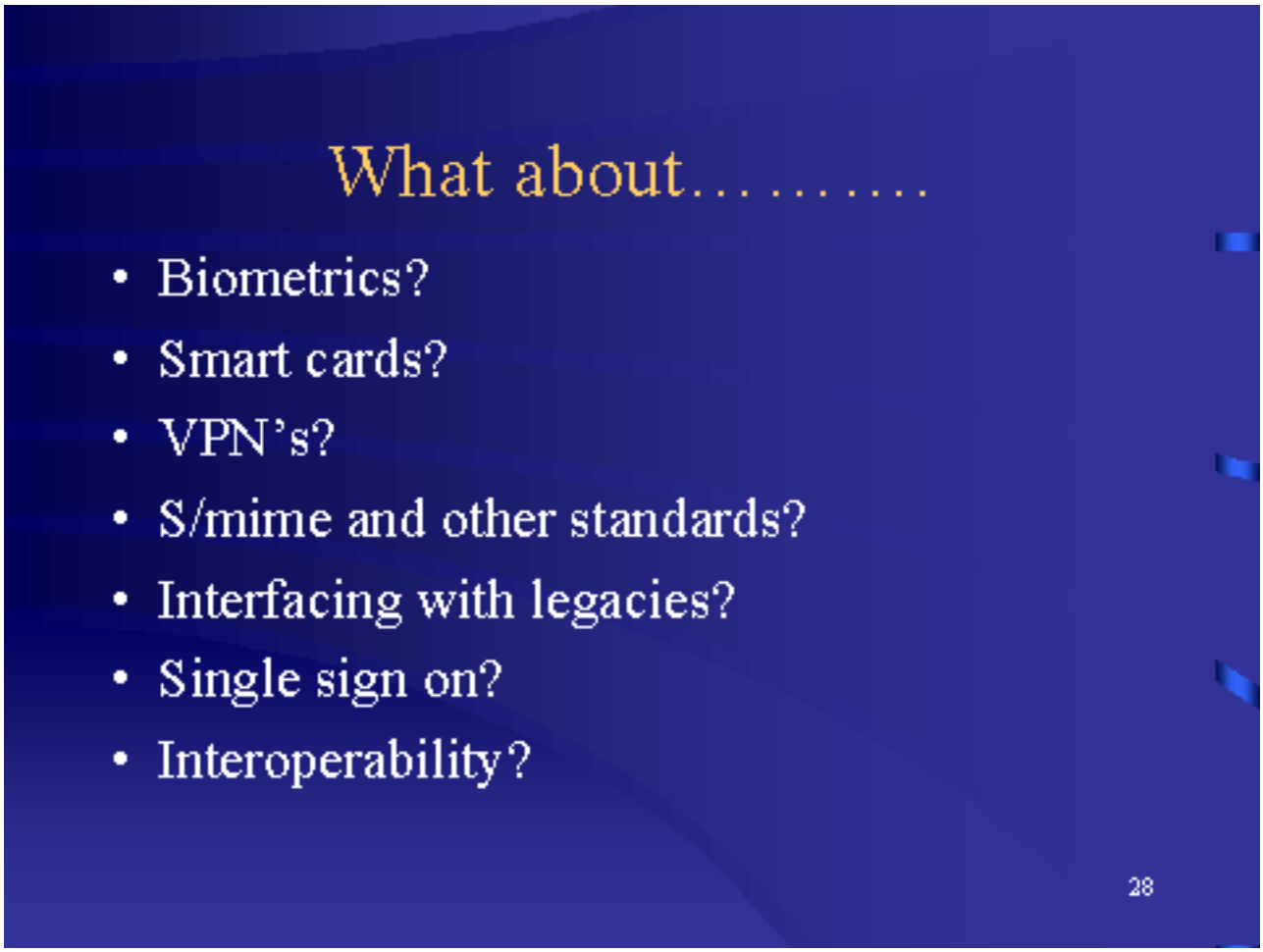

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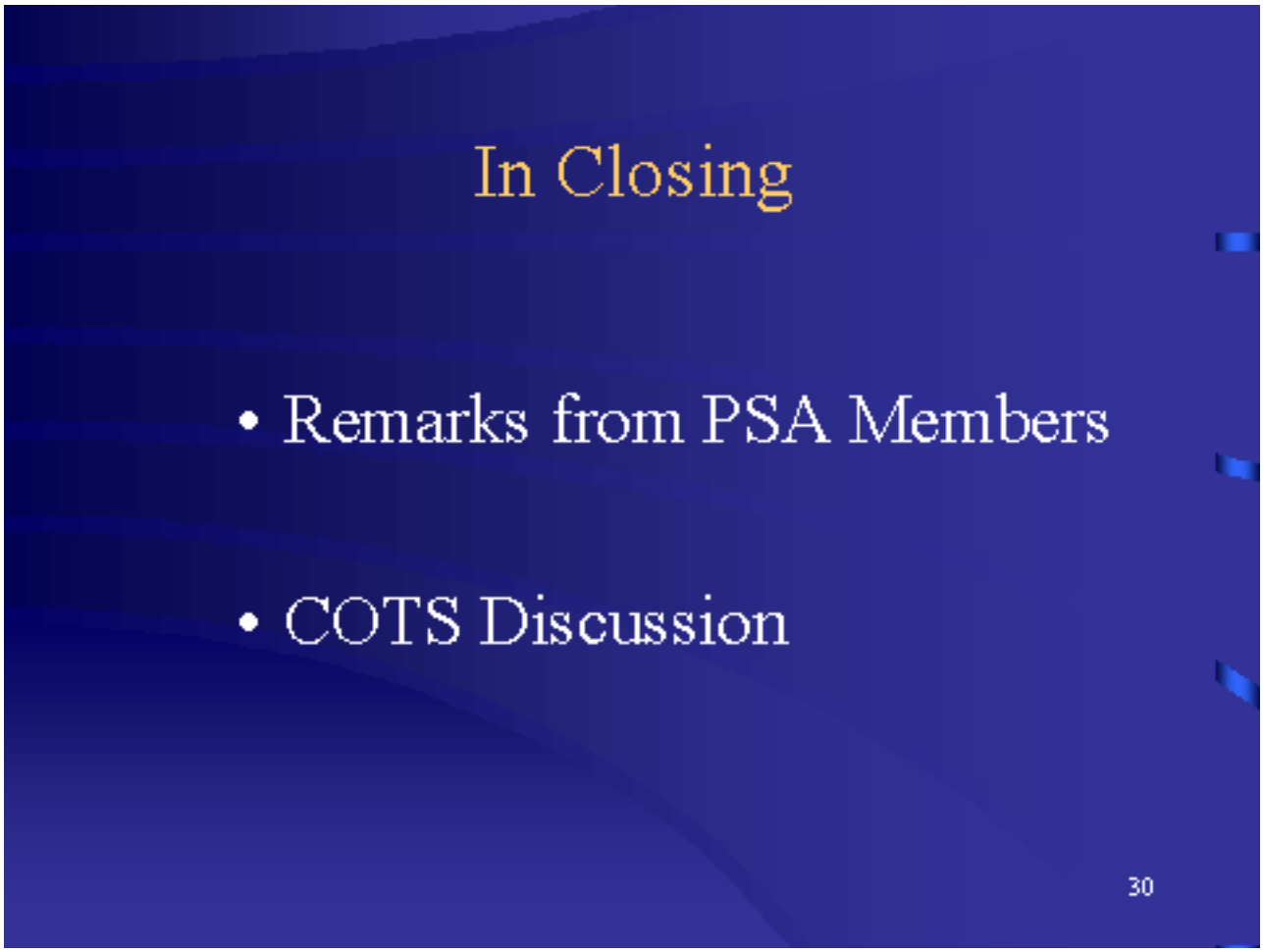

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